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LARYNGEAL GROWTHS.

[Communicated for the Boston Medical and Surgical Journal.—Continued from page 241.]

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THE propriety and the necessity of surgical interference with morbid growths in the larynx are insisted upon by all authorities. The smaller tumors, it is true, may not give rise to dangerous symptoms; but in the kind of growth most frequently met with in the larynx, namely, the vegetant excrescences, and in the rarer forms, the cancerous and the fibro-plastic tumors, it is of the utmost importance to take means for their removal before they have implicated any considerable portion of the mucous tissue, and their complete extirpation is rendered more difficult or impossible. But, while the smaller growths are generally only dangerous in the prospective, instances are recorded where they have not only induced alarming suffocative paroxysms, but have even caused death from spasm of the glottis.

Left to themselves, the prognosis in the majority of the cases of laryngeal neoplasms is unfavorable. Dr. Buck says that the prognosis is, if the growth be left to itself, almost necessarily fatal, and that the catastrophe often occurs suddenly. Other authorities speak to the same effect, and Green says that, often, "the sudden death of the patient was the first indication of the existence of the tumor."

The treatment of laryngeal growths may be divided into two epochs, namely, the periods before and since the perfection of the art of laryngoscopy.*

The first epoch commences with Ehrmann, of Strasbourg. Prior to his time, the diagnosis had been but rarely made, and the treatment, when any was employed, had been either empirical, by remedies which had no effect upon a mechanical obstruction, or, in *extremis*, by the operation of tracheotomy. The idea of extirpating laryngeal growths had, indeed, occurred to other surgeons, and Desault, Dupuytren, Herbert-Mayo and Ryland,† had suggested the possibility of

* The laryngoscope was invented by Babbington, in 1829, or as some aver, by Senn, about the same time; but the art of laryngoscopy began only with Czermak, about the year 1858.

† "If it were possible to ascertain the existence of a polypus in the larynx during life," says Ryland, "it would be the duty of the surgeon to attempt its removal by the knife, or

operating through an artificial opening in the larynx; Ehrmann had even been preceded in this operation by Brauers of Louvain; but the real interest in the subject begins with Ehrmann.* Through his patient search for, and collation of, cases, and his careful study of the symptomatology, a real advance was made in the power of diagnosis; while by his description of the modes of operating, and of the means of overcoming the difficulties attending so serious an operation, the hopes of future success in the treatment of a most grave affection became comparatively bright.

The operations for the extirpation of neoplasms in the larynx before the days of the laryngoscope are of exceeding interest, and they are so few in number that I shall here give an abstract of each case.

The first operation recorded is that of G. Koderik, a surgeon of Brussels. But few details of the case are known, but from a review† of it quoted by Lewin, it appears that a laryngeal polyp, which Levret could not ligate with his instruments, was ligated by Koderik by means of a flexible instrument like a string of beads (*rosenkranz-artig*). The date of the operation was 1771, and recovery is said to have followed.

The next case, in point of time, is that of Brauers of Louvain, in about the year 1833. The patient was an architect, aged 42 years, in whom Brauers correctly diagnosed a laryngeal tumor, and upon whom he operated by laryngotomy. The whole cavity of the larynx was filled with a warty growth which proved to be malignant. Repeated applications of caustic and the actual cautery were made, but without causing the disappearance of the disease which promised to prove fatal.

Next follows the case of Ehrmann, in 1844, which enjoys the honor of being the first instance of recovery after extirpation by laryngotomy. The subject was a woman aged 33 years, with symptoms of a laryngeal affection existing for four years. The diagnosis was rendered certain by bits of the growth having been coughed up from time to time. The operation was commenced by an incision through the cricoid cartilage and the first two rings of the trachea. A tracheotomy tube being inserted, the patient was allowed to rest forty-eight hours, at the end of which time the incision was continued through the median line as far as the hyoid bone. A polypous excrescence was then found implanted along the left vocal cord, and was excised with a bistoury and dissecting forceps. The wound was brought together, and the canula was removed on the third day. The parts had completely healed in twenty-nine days. The patient could breathe freely, but the aphonia remained; she died five months later of typhus.

by a ligature round its base; for this purpose it would be necessary to divide the cricoid cartilage, and probably the thyroid also," but he adds, "I am not aware of any case in which this operation has been undertaken." (*Diseases, &c. of Trachea and Larynx*. London, 1837.)

* *Histoire des Polypes du Larynx*. Strasbourg, 1850.

† Richter's *Chirurg. Bibliothek*.

The next case is that of Dr. Horace Green, of New York. The patient was a girl between ten and eleven years of age, who had had symptoms referable to the respiratory apparatus, and especially to the larynx, since her third year. For some time previous to the discovery of the tumor, suffocative paroxysms were very frequent and alarming. The discovery was quite accidental, the existence of a neoplasm having never been suspected, and was made while examining the condition of the epiglottis. The patient chancing to cough while the tongue was depressed, a round whitish growth appeared to view, for an instant, at about the left lateral border of the epiglottis, and then suddenly disappeared. The removal of the tumor was effected by seizing it with a double hook, and dividing the pedicle as low down as possible with a probe-pointed knife. The polypus proved to be nearly round, of the size of a small cherry. "It was quite smooth, was covered by a mucous membrane, and presented all the characteristics of a fibrous tumor." Its attachment was supposed by Dr. Green to be to the vocal cord, or the false cord.

After the operation, all the unfavorable symptoms disappeared, and the patient subsequently enjoyed excellent health.

Dr. Gurdon Buck's case * comes next in order of time.

The patient was a woman, aged 51, who had had hoarseness and loss of voice for a year. Later, dyspnoea and suffocative paroxysms came on. The obstruction was evidently in the larynx, although the finger failed to reach any growth.

The operation was performed on the 3d of May, 1851. An incision was made into the crico-thyroid membrane, and continued in the median line through the thyroid cartilage; it was then continued downwards through two or three rings of the trachea. A number of small pediculated nodules were found on the left lateral wall of the larynx, and, on the right side, partly concealing the ventricle, was a broad-based tumor of considerable size, like condylomata, which proved to be cancerous. The growth was only partially removed on the first day, on account of the exhaustion of the patient, but the tracheotomy tube was inserted, and the attempt at removal renewed the following day, when, also, acid nitrate of mercury was applied. On the 2d of September, the same operation was repeated. The patient was, however, obliged to wear the tracheotomy tube constantly, and it was, at the last operation, inserted at a lower point in the trachea, as the disease was rapidly extending downwards. Death took place suddenly on the 4th of August, 1852, while the tube was being removed.

The next case is that of Middeldorpf.†

The patient was a clergyman, 42 years of age, in whom a lobulated pinkish-yellow tumor, of the size of a walnut, could be seen rising up near, and in the rear of, the epiglottis. Its attachment could not

* Transactions of American Medical Association for 1853.

† Die Galvano-caustik. Breslau, 1854.

be made out satisfactorily, but as the patient had, after suffering for some time with laryngeal symptoms, become subject to suffocative attacks, there seemed to be little doubt that the seat of the growth was somewhere in the interior of the larynx.

The operation consisted in passing the galvano-caustic wire over the tumor, pressing it down as far as possible towards its point of attachment, and applying the current. The symptoms were relieved immediately after the separation of the tumor, and the patient continued well for about a year, when he coughed up a fragment of the morbid growth. He was, however, seven years subsequently, tolerably well. The growth was supposed to be cancerous.

Prat's case* was that of an American who had, for a considerable time, been troubled with difficulty of swallowing, and, later, with embarrassment of respiration. The tumor could be felt with the finger, but could not be excised through the cavity of the mouth. Prat therefore made a transverse incision through the hyo-thyroid membrane, which brought him into the space between the back of the tongue and the lingual face of the epiglottis. The tumor, a firm fibrous growth three-fifths of an inch in diameter, was found attached to the left side of the laryngeal face of the epiglottis, and was seized with a hook and removed with a pair of curved scissors. The wound was closed by sutures, and complete recovery took place.

A case of the removal of growths by the use of the probang, by Dr. Green, in 1846, may also be properly mentioned in this connection.

The patient was a lawyer, aged 42 years. Symptoms of laryngeal disease had existed for three years, and these finally became so marked as to convince Dr. Green that there was serious obstruction in the larynx. The sponge-probang, charged with a strong solution of nitrate of silver, was passed, with some difficulty, through the rima glottidis, and, on its being withdrawn, several small bodies were found attached to it. The patient also coughed up several more, amounting to a dozen in all. These proved to be vegetant excrescences. The passage of the probang was continued daily for two weeks, and the number of excrescences brought away amounted to about thirty. Subsequently the symptoms and general condition of the patient improved materially, so that four years afterwards, although he could speak loud only with considerable exertion, his condition was generally satisfactory.

In this case the caustic might have had, and probably did have, an influence in arresting the further growth of the disease.

The above are the only well-authenticated instances of removal of laryngeal growths, in pre-laryngoscopic times. Astley Cooper is, however, represented as having, at a date not precisely known, torn off a growth from the epiglottis with his finger. The patient was fifty years of age, and death took place from hæmorrhage after a second attempt at removal. The specimen is still preserved in the museum of Guy's Hospital.

* Gazette des Hôpitaux, 1859, p. 409.

Middeldorpf also speaks of Herrich having, with a pair of forceps, torn off a polypus which presented itself to view above the aperture of the larynx.

Lastly, Turck attributes to Regnoli the extirpation of a laryngeal growth by means of a bistoury. In these last two cases also, I find no dates and but few details given.

The second epoch in the treatment of laryngeal growths commences with Czermak, the inventor of the art of laryngoscopy, in the year 1858.

It is impossible to overestimate the advantages gained in the diagnosis and treatment of these affections by the use of the laryngeal mirror. In former periods, as has before been stated, the diagnosis, when made at all, was made at so late a date, that not only was the important function of the voice irretrievably lost, but, from the extent of the healthy tissue implicated, the final success of the operation for removal, which it was found necessary to perform by an artificial opening to save the life of the patient, was seriously compromised. At present, there are few cases, and those generally occurring in extreme youth, in which the diagnosis cannot be made at the earliest moment at which laryngeal symptoms present themselves.

The existence of a neoplasm in the larynx being once determined, the question as to the means to be adopted for its removal comes up. I need hardly say that, with the "eye to guide the hand," the treatment determined on, is, in all cases in which it is practicable, employed through the natural passages by the aid of the laryngeal mirror. Occasionally, however, cases present themselves to the practitioner in which an operation through the cavity of the mouth will not avail for the thorough removal of the disease. This, for example, may happen in cancerous or fibro-plastic tumors, especially if they are in a locality difficult of access, or buried deep in the tissues; and also in cases of growths, which have attained a large size, in children too young to bear a laryngoscopic examination. While, therefore, the means of aid in these affections is immeasurably in advance of the former period, it is by no means in our power to discard altogether the operations of pre-laryngoscopic times.

The division of the methods of treatment may therefore be stated as follows.

1. Removal *per vias naturales*.
2. Removal through an artificial opening.

In the first division are comprised—Removal by Cauterization, and, Removal by Instruments, either by Ligation, Excision, Evulsion, Crushing or Scarification.

Cauterization. Caustics should be carried into the larynx, with rare exceptions, only with the aid of the laryngeal mirror, for the reason that the stronger caustics are necessary for the removal of all except the lowest organized kinds of growths, and in no other way can the application be made to the desired locality. Even in the

use of the solution of nitrate of silver, of whatever strength, it would not only be useless, but most injudicious, to subject the healthy mucous membrane of the whole interior of the larynx to medication, for the sake of distributing a small portion of the liquid over the growth. The small papillary growths or follicular prolongations, attending and consequent upon chronic laryngitis, would not come under this rule. Such appearances, I have noticed, disappear with the subsidence of the inflammatory condition which gives rise to them.

The treatment by cauterization is adapted to such growths as are too small to be grasped by instruments, or to such larger growths as are sessile, whether they be the lowest organized of the neoplasms, such as the vegetant excrescences, or the dense compact fibro-plastic growths. Cauterization is also indicated in tumors which are found to bleed profusely.*

The caustics which are most employed in the removal of laryngeal tumors are nitrate of silver, nitric acid, Vienna paste, chromic acid, acid nitrate of mercury, and caustic potash.

The instruments, which have been devised for the purpose of applying these caustics, are the laryngeal porte-caustique, the silver probe, and the forceps. The porte-caustique is of various designs, but the object, in all of the patterns, is to keep the caustic covered until the point it is desired to apply it to is reached, when it is thrust out of the tube in which it is enclosed. The forceps are used to convey a small portion of caustic in a solid form to the desired spot, where it is deposited. Both these forms of instruments are, however, bulky, and when in use, not only cut off a good deal of the view into the larynx, but materially increase the chances of the sudden closure of the larynx by accidental contact with the epiglottis or other parts at the opening of the larynx. The other instrument mentioned, namely, the silver probe, can, by a little ingenuity, be made to answer every purpose in cauterization, and it has this great advantage, that on account of its slender make, the view into the larynx is hardly obstructed in the least. It is especially recommended by Fournié as a substitute for all the more complicated and bulky porte-caustiques. In order to make it still more serviceable, I recommend operators to have a little cup-like hollow made in the bulb at the end. Into this may be melted nitrate of silver; or a bit of sponge may be crowded into it, by which any caustic, either in powder or in solution, may be carried into the larynx. The overhanging edge of the hollowed bulb prevents the caustic from coming in contact with the sides of the larynx. It may be added that the probe has this additional advantage over the other porte-caustiques, that it is very flexible, and can be therefore easily bent and lengthened to adapt it to manipulation in any part of the larynx.

* Mackenzie (op. cit. p. 134) speaks of a case of warty growth on the vocal cord, the base of which he endeavored to divide with the laryngeal lancet. After the operation hæmorrhage ensued, and continued for some time to an extent that was really alarming.

In this connection, it is important to note a fact, to which attention is called by Semeleder, and which I have myself had occasion to verify, "that it is not possible in the larynx to cauterize as severely, or to allow the cautery to work mechanically, as we do elsewhere when we wish to destroy the parts, because there is not sufficient time, and the individual parts are too movable; and a superficial cauterization in many cases will lead rather to a more rapid growth than to a shrinking of the tumor—for we apply the pencil of nitrate of silver in a very different manner when we wish to destroy the hardened edges of an ulcer and when we would excite indolent granulations."*

In explanation of the phrase above quoted, "because there is not sufficient time," it may here be stated, what may already be generally known, that the larynx closes immediately upon the application of the caustic, and that a spasm more or less severe ensues. The patient should be cautioned that such a result will probably follow the application, and should be assured that there is no danger to be apprehended. This assurance may have to be repeated when the spasm is upon him, as he will very likely, if the spasm is, as it sometimes proves to be, very severe, allow his own distressing feelings to weigh more in his own mind than the practitioner's words of encouragement. The severity of the spasm varies somewhat with the kind of caustic used. I know of none that produces a more severe paroxysm, or that leaves a more disagreeable effect behind it, than the solid nitrate of silver. Chromic acid and the acid nitrate of mercury, I have noticed, may not induce any considerable spasm at the moment; but a half hour to an hour after the application I have known a severe spasm to be excited. Caustic potash produces comparatively little spasm.

[To be concluded.]

DR. WEBBER'S ESSAY ON CEREBRO-SPINAL MENINGITIS.

[Continued from page 244.]

JOB WILSON, of New Hampshire, has given extensive observations on the climate of New England for about twenty-five years. He says, "From about 1792 to 1804, a period of about 12 years, the winters, with a few exceptions, appear to have been shorter and milder than the preceding winters were, and the summers longer and hotter than those of former years."

"On the 8th of October, 1804, a new era appears to have commenced. On this day a most tremendous snow storm happened." "The first permanent snow did not happen till near the 20th of December; but the quantity of snow that fell from this time to about the middle of February, 1805, was immense." "The spring and first summer months were unusually cool." In the preface he says,

* Caswell's translation, p. 138.

"Our climate (particularly the climate of New England) though at best very changeable, for many years prior to 1804, has been comparatively mild and steady." "But since 1804, a new era has commenced. The changes of our climate have been greater and more frequent. The effects of these changes have been very remarkable, both in the animal and in the vegetable kingdoms. To many individuals of each of these kingdoms, they have proved immediately fatal." "The late changes, or some other cause, have produced a disease, or rather diseases, with which our mother country appears never to have been acquainted, as she never suffered so great and sudden extremes of heat and cold."

In regard to 1806 he remarks, "This year I conceive to have been rather more changeable than former years have been, when compared with succeeding years; it was comparatively mild and temperate." "The ten last days in February were uncommonly warm; the mean temperature of the days was 41, and the nights 28. On the 26th day, the mercury fell suddenly from 40 to 12 at night; and rose the next day to 50." It will be remembered that it was in March of this year that the so-called "spotted fever" appeared in Massachusetts.

"The mean variations in the month of February, March and April, are 35, 36 and 34; but in this year (1807) they are 39, 53 and 55; the diurnal variations are comparatively great, which great changes of temperature we should readily conclude would produce violent disease, which indeed we find has been the case." August was changeable, rainy and chilly. In 1808 there was less variation of temperature, with rains in February. In 1809 also there was nothing unusual except an uncommon low temperature. In January, 1810, the variations were greater. During these years, from 1807 to 1809, the "spotted fever" appeared in many parts of New England, especially in Connecticut. In the early part of 1810 the disease appeared, especially in Massachusetts, where it was noticed by the State Medical Society, in Connecticut and Vermont: it was also seen in Canada.

The summer and autumn of 1810, and the whole of 1811, were moderate, without great variation and generally warm. No extensive epidemic prevailed during that time.

January of 1812, and also February, were subject to great variations of temperature. In the former month there were seven exceedingly cold days, commencing about the middle of the month. In the latter month "seven extraordinary variations happened." "The variations will stand thus: 48, 36, 33, 33, 35, 40, 43; and the period of most of these great variations is from 12 to 18 hours only." In March also there were great variations of temperature. "It should be remarked, that the periods of these variations are but little more than 12 hours. The number of degrees of variation are as follows: 34, 46, 30, 38, 30, 31, 35, 36, 46, 31." Rain fell in

both February and March. The other months were not essentially different from usual. Cerebro-spinal meningitis prevailed, especially in New Hampshire, Vermont and Maine, during the spring.

In February, 1813, there was one variation of 61° and several others of less amount. "March was not so pleasant a month, but more stormy." "No less than six great and sudden changes happened; as great as 61 , 50 , 35 , 30 , &c." April was warm, with chilly nights. The other months were in no way remarkable. "Spotted fever" appeared in January, and by the middle of February prevailed extensively in New Hampshire. It extended its ravages into the summer months, but was then much less severe.

During 1814 the winter and spring months were quite moderate, without any remarkable changes. In June there was a variation of 45° in 31 hours, and from then till September less variations about once a fortnight. In the latter month there was a variation of 55° in 32 hours. In October there were also several variations, and November was more changeable than usual. During this time the disease appeared in New England.

Dr. T. F. Prewitt, in the *St. Louis Med. and Surg. Journal*, vol. 2, says that the disease which we are considering "first made its appearance among the soldiers stationed at Chillicothe, during an unusually severe and protracted spell of dry, cold weather."

Dr. Frothingham found it to prevail during mild and damp weather in the winter.*

This record of the weather and temperature is not very full, and hence extensive generalization would not be proper; but if we take into consideration that the sudden variations mentioned by J. Wilson were usually attended with wet weather, and then notice that eight out of fourteen of the authors quoted in the previous pages mention the occurrence coincident with this disease of changeable and damp weather, or of coldness and dampness, we shall find some reason for believing that such a state of the atmosphere is favorable to the action of those influences which produce this disease. It would, however, be gratifying to have more facts upon this subject.

Not only cold and damp and variable weather were favorable to the production of this disease, but situation seems also to have had some influence.

Thus the Committee of the Massachusetts Medical Society remark that most of the places where the disease occurred are inland and elevated, with ponds and streams. In Cambridgeport most of the cases occurred near a marsh, and in Boston in that portion of the city exposed to the flats and water.

The town of Minisink, N. Y., is bounded on the east by the great drowned lands of the Wallkill, which renders the inhabitants liable to intermittent, remittent and bilious fevers in the fall of the year.†

* *American Medical Times*, April 30, 1864.

† Dr. D. R. Arnold, in *American Medical and Philosophical Register*, vol. 1.

Dr. Rush says that it "prevailed most in the interior; the sea coast was exempt or suffered little. And yet in the interior of the State, the most swampy situations, margins of rivers and places the most subject to the endemical, autumnal, bilious fevers have suffered most severely."*

Dr. Mann, in his work on the diseases of the army, already referred to, gives a description of Greenbush where the pneumonic form appeared, and also of Albany where there were some cases of the cerebral variety. He says, "Greenbush is a township on the east bank of the Hudson, directly opposite Albany. The town, which occupies eight miles square, has a diversity of soil and surface. Alluvial flats border the river. Hills present themselves in the rear, distant from the bank of the river from one quarter to one mile, gradually rising until they gain an elevation of 200 feet or more. The soil in some places is clay, in others a mixture of clay, loam and sand.

"The cantonment is on an elevated plane, one mile east of the Hudson. Here are barracks for the troops of the United States army, sufficiently capacious to accommodate 4000 men, with adequate quarters for their officers. On an eminence 60 feet higher, is the Hospital, which may accommodate 100 patients. The wards of this hospital are too small in their dimensions, both for health and convenience, being only 20 feet by 16, and 9 feet in height.

"The elevation of the hospital is so great above the surface of the river, that the fogs, which, during the hot season, are suspended over the flats and villages on the banks, seldom rise to its summit.

"The temperature of the climate on the Hudson is more regular than in the same latitude on the Atlantic shores; where are experienced greater and more sudden transitions of weather than here. The cantonment, at Greenbush, has the reputation of being healthful; and the country in its vicinity salubrious.

"The city of Albany, the capital of the State of New York, is situated one mile in length on the west bank of the Hudson. It rises from the river by a gradual ascent nearly 200 feet to the elevated plain. The width of this city is from one quarter to one half a mile. On the margin of the river, the lands are alluvial and rich; while those more elevated and uneven, are a mixture of clay and sand, and barren. That part of the city, on the alluvial flats, has the reputation of being less salubrious than that on the hill. The want of a rigid health police is manifested by the filthiness of some of the streets; more especially of the back yards connected with stables and kitchens."

Dr. Lucas, of Brunswick, Va., thus describes the topography of Mecklenburgh, Lunenburg and Brunswick, Va., where the disease appeared in 1818-22. "The country is one, as to elevation, tolerably high; although not mountainous, yet it is uneven and broken.

* Medical Repository, New Series, vol. iii.

There are few, if any marshes at all to be found, but many mill-ponds and two rivers. The Roanoke runs through part of Mecklenburg, has extensive low grounds on each side of it, varying from a quarter to a half mile in width. The Meheria divides Lunenburg from Mecklenburg and runs through a part of Brunswick, in which country there are a few places having low ground of a few hundred yards in width. The low grounds on both these streams are well drained by means of ditches. The country lying generally hilly, the mill-ponds are not very broad but tolerably long. The water commonly used is fine spring-water. A line running north and south, would about place the part of the counties that have suffered most by this disease, on a parallel with the head of tide water in the Appomattox river; perhaps ten or fifteen miles above it."*

There is some doubt with regard to the identity of the disease which occurred at Marietta, O., in 1823. The situation of that town is at the confluence of the Muskingum and Ohio rivers. The former divides the town into two unequal parts. The soil is alluvial. The houses are wet during floods.†

At Toulon, in the winter of 1829-30, the convicts who were quartered on shore escaped; but those on board the centre one of three old hulks were attacked. It will be remembered that this was not only unfavorably situated for ventilation, but was also in close proximity to an old dock, where the deposit of many years was being cleaned out. This galley was also the most dilapidated, allowing the rain to penetrate through the decks; and it is not improbable that much bilge water was constantly present.

Prof. Rienzi, speaking of the epidemic which occurred during the spring of 1840, at S. Marzano, mentions that in January, 1840, the Saono overflowed its banks, and left S. Marzano as an island.‡

In 1843, the province of Seine et Marne, and in 1844, Haute Loire, were attacked with this disease. M. Claubry, who made a report with regard to it to the Academy of Medicine, says: "The village of Bannost (district of Provins) is situated on a hill in the midst of valleys which it overlooks, and in the bottom of which the rain waters collect.

"The village of St. Vénérand (district of the Puy) is, on the contrary, situated on a hill sufficiently elevated above the course of the Allier, from which, however, it experiences damp vapors. Placed on that hill, about 1,200 metres above the level of the sea, this village enjoys a naturally cold temperature, by reason of the long duration of fogs and snows which surround it during the winter season. The inhabitants of this village are in the habit of descending from it into the plain below, to engage in agricultural labors. There they generally encounter moderate temperature, and after being warmed by their

* Medical Recorder, vol. v.

† Dr. Hildreth, Philadelphia Journal of Medical and Physical Sciences, vol. ix.

‡ Medical Examiner, New Series, vol. i.

rural occupations, ascend again to their village upon the approach of night, and are exposed to a very cold temperature." *

[To be continued.]

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT. BY CHARLES D. HOMANS, M.D., SECRETARY.

JULY 23d.—*Paraplegia; Disease of the Bladder; Destructive Inflammation of the Spinal Cord.*—Dr. MINOT said that, more than a year ago, he had reported to the Society a case of what he then considered reflex paralysis, from disease of the bladder. The spinal cord, which appeared externally to be quite healthy, was given to Dr. Dean for microscopical examination, without being incised. The examination having been deferred a long time, on account of Dr. Dean's ill health, was finally made by Dr. Charles F. Crehore, whose report will be given below. The case is as follows:—

The patient was a man, 38 years old, a lawyer by profession, but of late engaged in the recruiting business, who entered the Massachusetts General Hospital, March 12th, 1865, with complete paralysis of both lower extremities, both as to motion and sensation. The bladder and rectum were also paralyzed. He had been a healthy man, but a great smoker, and had had gonorrhoea and chancres, followed by a slight eruption a year ago. For a few months previous to his entrance into the Hospital, he had had occasional twitchings of the legs while sitting, and also while in bed. He had also experienced some urinary difficulty of late—a little difficulty in starting the flow, but no other trouble of that nature. He had also had some pain in the back, latterly, which he considered rheumatic. March 3d, he had considerable dull pain in the back, from the hips to the shoulders, which lasted a day or two. On the 10th, this pain returned, and was quite severe. That noon he found himself unable to void his urine, and also had difficulty in walking. He sent for a physician, who, after some trouble, passed a catheter and drew off his water. The difficulty in walking increased, and the same evening he had much pain in the back, and some numbness in the left foot. On the 11th, he lost all power over both lower extremities, and sensation in the right. Dr. Hodges was called to him, and on introducing a catheter, found that there was a false passage. The next day there was loss of sensation in the left lower extremity. When he entered the Hospital, the reflex action was almost wholly gone, the patient merely moving the toes a little when the soles of the feet were tickled. There was no power over the rectum or bladder. The urine was bloody. There was no tenderness in any part of the back. The intellect was unimpaired. These symptoms continued to the last. On the 16th, hiccough came on, and he died on the 19th, at 5, P.M.

At the autopsy, which was made by Dr. ELLIS, the brain and spinal cord were normal in appearance, the latter not having been incised.

* Mem. de l'Acad. de Med., t. xiv.

Some small cysts were found in each kidney. The mucous membrane of the pelves of both was injected—slightly in the left, markedly in the right. In the latter there was some pus, and limited portions of the cortical substance showed signs of nephritis. The parietes of the bladder were of a blackish color, from great congestion. The inner surface was mostly covered with a yellow fibrous layer, perhaps half a line in thickness. The limited portions of mucous membrane free from this, in the prostatic portion, were smooth, and of a dark-blue color. The tissues in the neighborhood of the prostate were deeply injected. The mucous membrane of the urethra was also injected, and the canal contracted in the membranous portion. A false passage, sufficiently large to admit a medium-sized catheter, extended from the veru montanum into the bladder, at a point two inches beyond. The other organs were healthy.

Dr. Crehore's letter is as follows:—

"106 SPRINGFIELD STREET, July 18, 1865.

"MY DEAR SIR,—About a month ago, Dr. Dean handed me a spinal cord for examination. It was divided in short pieces and hardened in chromic acid solution previous to my receiving it, and was in a most admirable condition for cutting sections from.

"I discover nothing abnormal, except in a portion of the lower dorsal region, about two and a half inches in extent. At the commencement (upper), a spot between the posterior cornua is much softened, friable, and appears to consist of granular fatty matter interspersed with oil globules, corpora amylacea and connective tissue.

"Lower down, this condition extends so as to involve nearly the whole of the cord, leaving only a narrow border or margin of nerve-tissue upon the anterior and lateral portions. It gradually decreases, and disappears upon the side of the cord.

"In the diseased part little or no trace of nerve-tissue is discoverable. It is so friable that sections can only be made thin enough for study at its commencement and termination, where it is surrounded and supported by healthy nerve tissue.

"In the middle portion the whole of the grey matter is destroyed, and the whole of the posterior column of fibres is in like condition. Communication with the brain, &c., must have been wholly carried on by the exterior fibres of the antero and antero-lateral column.

"The disease seems evidently the result of destructive inflammation.

"The nerves arising from this part of the cord are distributed to the spinal muscles and abdominal parietes.

"I have submitted these notes to Dr. Dean, who desires me to say that they agree with and confirm the opinion he formed from a previous examination that he was forced by sickness to interrupt before it was completed.

Very truly, your ob't serv't,

"DR. F. MIXOT, 7 Charles St.

CHARLES FRED. CREHORE."

The same evening that this case was first reported, Dr. BORLAND reported the following similar one, which occurred under his care at the City Hospital. It is to be regretted that no microscopical examination of the cord was made.

Reflex Paralysis, following Suppression of the Catamenia.—An unmarried woman, 23 years old, a cloak maker by trade, entered the City Hospital Feb. 24th, 1865. Reported she had always led a regular

life, not overworked, or keeping late hours, and was fairly nourished. She was always well until one year since, when she had a sharp attack of acute rheumatism, and since then has always had more or less muscular and neuralgic pain. On Jan. 25th she wet her feet, taking some cold, and suddenly suppressing the menses, which were present. The next day, she experienced a dull, heavy pain in the lumbar region, with a sense of stricture in the abdomen, which last symptom persisted. Catamenia returned after two weeks absence, being present but a few hours, and then again suddenly stopping. The next day, Feb. 9th, she first noticed impairment of motion in the legs; this increased, and with it an impairment of sensation, and decided formication.

At her entrance to the Hospital, she was pale and weak; pulse 116; constipated bowels; inability to expel urine, requiring constant catheterism; these symptoms came on at the commencement of the paralysis. Dull pain in back and abdomen; entire paralysis of motion below hips, and very slight sensation; marked tenderness over distinct points along the lumbar vertebræ; anterior half of sole of left foot swollen and livid, the cuticle being detached in large masses from the seat of a blister, the base of which had a sloughy look. On the right foot, the balls of the toes were swollen, with sublivid bases to large unbroken blisters, distended with bloody serum.

Feb. 27th, three days after entrance, strongly marked reflex action was manifested on touching the feet or ankles. Sensation in thighs slightly increased. Sphincter ani completely paralyzed. Up to the 4th of March there was slight improvement in motion, none of sensation. The feet improved in condition somewhat, but deep gangrenous sloughs formed over the sacrum.

March 7th, for the first time since the commencement of the paralysis, she was able to pass urine voluntarily; this power lasted for twenty-four hours, and after this the urine dribbled away.

On the 12th of March, sleepless; pulse 96; anorexia; tongue furred; left thigh swollen, with marked oedema of dependent parts; obscure emphysematous crackling felt on pressure on inner edge of sartorius muscle; reflex action persists.

On the 14th of March, eighteen days from the commencement of the paralysis, she died.

At the autopsy, no lesion of the spinal cord, or sufficient disease of any sort to account for death was found—a small amount of tubercular disease at the apex of the left lung being the most noticeable.

Alluding to the first case, Dr. WARREN said that patients brought into the Hospital with retention of urine caused by stricture of the urethra, were very likely to have false passages made, previously to their entrance, by ineffectual efforts to relieve them by the use of instruments. Nothing requires greater forbearance on the part of the surgeon than to restrain himself from using an instrument when the patient is crying out in a paroxysm of agony to be relieved from his sufferings. Most of these cases are strictures which have been suddenly made impassable to the passage of urine from some inflammatory action, or from temporary congestion and spasm.

The course which he has generally found successful is the following:—

1st. In cases where it is possible to temporize, to give a large opi-

ate enema, and to cover the perinaeum and the lower part of the abdomen with warm anodyne fomentations. By these means sleep is generally produced, attended with profuse perspiration, and on awaking the bladder is often relieved, a stream of water having passed into the bed almost unknown to the patient. Then, by pursuing an antiphlogistic course for a day or two, a small bougie may be carefully inserted, and the stricture gradually dilated. No force should be used on any account.

2d. If the suffering is excessive and the distension great, so as ordinarily to indicate puncture of the bladder by the rectum, the patient may be etherized, when by passing down a filamentary bougie and insinuating it partially into the strictured part, a small stream will in some cases at once begin to flow by its side, or trickle away on its being withdrawn.

In one case, where an old stricture of many years' standing had gradually closed so as to produce complete retention of urine, and which required immediate relief, perineal section was performed with entire relief to the retention and permanent cure of the stricture.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, OCTOBER 25, 1866.

ETHNOLOGY IN AMERICA.

If there were any particular direction in which the study of natural science in this country needed the fostering support of a liberal patronage, it was that in the interest of which the most beneficent gentleman of this age has chosen to express his respect for our ancient University. No country in the world offers anything like the extensive field which America presents for the investigations of the pure anthropologist, or such fascinating mysteries connected with the life of prehistoric races. The mere discovery of a few rude fragments of flint and a portion of a human jaw in the old gravel beds of a French river, and of a remarkable skull in a German cavern within a decade, has been sufficient to revolutionize the beliefs and teachings of a century, to date back the existence of man on this planet unnumbered ages, and to create a new science in natural history. The first naturalists of Europe have hardly been able to think of any other subject, and nearly all their labors have been, directly or indirectly, conducted in relation to their bearings upon the study of man and his place in the scale of creation. The names and writings of Falconer, Christy, Lartet, Boucher de Perthes, Lyell, Steenstrup, Huxley and Darwin, have become as familiar and pleasant to the educated public as those of authors of modern history and romance, and when we reflect how little was known of man's prehistoric existence ten years ago, and how much has been learned within that time by explorations in neglected refuse-heaps, by the ocean, in the muddy bottoms of inland lakes, in the unsearched soil of well-known caves, and in the gravel-beds of antediluvian time, we cannot doubt that we are only on the threshold of this enchanting study.

In America, ethnology has for a longer time occupied the thoughts of the student of nature, but in a narrower field. There have been hot discussions as to the unity of man's origin, studies of race prompted and biassed by political prejudice, superficial and imaginative descriptions of the manners and customs of our aborigines, large collections made to illustrate only their craniology, a few hasty explorations under government patronage of the strange mounds of our western lands, and reports by individual explorers among the ruins of Yucatan and Mexico; but with all this we know little, almost nothing of the races which preceded the white man upon this continent. We have no need to explore the recesses of caverns for skulls, nor the gravel of past geological eras for remains; our studies of primitive man may be pursued with living specimens, and our first duty is to conduct them in a systematic method before the rapidly vanishing opportunity has entirely passed away.

What a magnificent museum a few years of such labors, well directed, might build up, stored as it would be with the crania and skeletons, the fabrics, and paintings to illustrate the customs and physiognomy of every tribe of the red man still existing, and with the bones of the existing animals associated with him, also becoming extinct, which possess so great value in connection with the remains found with still earlier and even fossil man; with models of the ancient earthworks of the West and the remains which thorough exploration would bring to light of those mysterious mound builders; with relics of the unknown miners from the copper regions of Lake Superior; with the results of proper scientific expeditions among the ruined palaces of Central America, which the writings of Prescott and Stevens have painted in such fascinating colors; and, lastly, with the vestiges of still more remote epochs which remain to be discovered in the soil of this vast continent. Such are the results which may be anticipated from this wise and generous gift of Mr. Peabody. Such a museum is now, in fact, contemplated by the Emperor of France, in behalf of the interests of Archæology and Ethnology in Europe, under the direction of Prince Napoleon.

How admirably the founder of this princely endowment understands the necessities and organization of such a trust, will be evident to our readers on examining the instrument of gift published below. It only remains to select the proper person to fill this new chair in the University to ensure the success of a project which has long been regarded by men of science as of the utmost importance.

GEORGETOWN, October 8, 1866.

To the Hon. Robert C. Winthrop, His Excellency Charles Francis Adams, Francis Peabody, Stephen Salisbury, Asa Gray, Jeffries Wyman, and George Peabody Russell, Esq's:

Gentlemen,—Accompanying this letter I enclose an instrument giving to you one hundred and fifty thousand dollars (\$150,000) in trust for the foundation and maintenance of a Museum and Professorship of American Archæology and Ethnology, in connection with Harvard University.

I have for some years had the purpose of contributing, as I might find opportunity, to extend the usefulness of the honored and ancient university of our Commonwealth, and I trust that in view of the im-

portance and national character of the proposed department and its interesting relations to kindred investigations in other countries, the means I have chosen may prove acceptable.

On learning of your acceptance of the trust, and of the assent of the President and Fellows of Harvard College to its terms, I shall be prepared to pay over to you the sum I have named.

Aside from the provisions of the instrument of gift, I leave in your hands the details and management of the trust; only suggesting, that in view of the gradual obliteration or destruction of the works and remains of the ancient races of this continent, the labor of exploration and collection be commenced at as early a day as practicable; and also that in the event of the discovery in America of human remains or implements of an earlier geological period than the present, especial attention be given to their study and their comparison with those found in other countries.

With the hope that the Museum, as thus established and maintained, may be instrumental in promoting and extending its department of science, and with fullest confidence that under your care the best means will be adopted to secure the end desired,

I am, &c.,

GEORGE PEABODY.

I do hereby give to Robert C. Winthrop of Boston, Charles Francis Adams of Quincy, Francis Peabody of Salem, Stephen Salisbury of Worcester, Asa Gray of Cambridge, Jeffries Wyman of Cambridge, and George Peabody Russell of Salem, all of Massachusetts, the sum of one hundred and fifty thousand dollars, to be by them and their successors held in trust to found and maintain a Museum of American Archaeology and Ethnology, in connection with Harvard University, in the city of Cambridge, and Commonwealth of Massachusetts.

Of this sum I direct that my said trustees shall invest forty-five thousand dollars as a fund, the income of which shall be applied to forming and preserving collections of antiquities, and objects relating to the early races of the American Continent, or such (including such books and works as may form a good working library for the departments of science indicated) as shall be requisite for the investigation and illustration of Archaeology and Ethnology in general, in main and special reference, however, to the Aboriginal American races.

I direct that the income of the further sum of forty-five thousand dollars shall be applied by my said trustees to the establishment and maintenance of a Professorship of American Archaeology and Ethnology in Harvard University; said professor shall be appointed by the President and Fellows of Harvard College, with the concurrence of the overseers, in the same manner as other professors are appointed, but upon the nomination of the founder or the board of trustees. He shall have charge of the above-mentioned collections, and shall deliver one or more courses of lectures annually, under the direction of the government of the university, on subjects connected with said departments of science.

Until this professorship is filled, or during the time it may be vacant, the income from the fund appropriated to it shall be devoted to the care and increase of the collections.

I further direct that the remaining sum of sixty thousand dollars be invested and accumulated as a Building Fund, until it shall amount

to at least one hundred thousand dollars, when it may be employed in the erection of a suitable fire-proof museum building, upon land to be given for that purpose, free of cost or rental, by the president and fellows of Harvard College, the building, when completed, to become the property of the college, for the uses of this trust and none other.

The board of trustees I have thus constituted shall always be composed of seven persons, and it is my wish that the office of chairman be filled by Mr. Winthrop—in the event of his death or resignation, by Mr. Adams, and so successively in the order I have named above. The trustees shall keep a record of their doings and shall annually prepare a report setting forth the condition of the trust and funds, and the amount of income received and paid out by them, during the previous year. This report, signed by the trustees, shall be presented to the president and fellows of the college.

In the event of the death or resignation of Mr. Winthrop, I direct that the vacancy in the number of the board be filled by the president of the Massachusetts Historical Society, who *ex officio* shall forever after be a member of the board. In the event of the death or resignation of Mr. Peabody, the vacancy to be filled by the president of the scientific body now established in the city of Salem, under the name of the Essex Institute; of Mr. Salisbury, by the president of the American Antiquarian Society; of Prof. Gray, by the president of the American Academy of Arts and Sciences; and of Prof. Wyman, by the president of the Boston Society of Natural History, all of whom shall forever after be *ex officio* members of the board.

Should the president of either of the societies I have named decline to act as a trustee, such vacancy, and all other vacancies that may occur in the number of the trustees, shall be filled by the remaining trustees, who shall, within a reasonable time, make the appointment or appointments.

I give to my said trustees the liberty to obtain from the Legislature an act of incorporation, if they deem it desirable; to make all necessary by-laws, to appoint a treasurer, and to enter into any arrangements and agreements with the government of Harvard College, not inconsistent with the terms of this trust, which may, in their opinion, be expedient.

(Signed)

GEORGE PEABODY.

Georgetown, October 8, 1866.

LETTER FROM PHILADELPHIA.

MESSRS. EDITORS,—The medical schools of the city have opened, and with every prospect of full attendance. The election which has just passed debarred many from coming at the regular opening of the sessions, but now, that being over, the seats begin to be well filled, and new faces greet the old ones daily. The introductory lecture at the Jefferson was delivered by Prof. Wallace; that at the University by Prof. Penrose, both of them to large and attentive audiences. Of late years, the contest as to the number of students has been a close one. Last year, each had the same number of graduates. Heretofore, the University has led all the other schools. Indications now point to a different result. The system pursued at the Jefferson College this session is, and will continue to be, somewhat different from that formerly adopted. Most excellent facilities for clinical instruction will be offered. Prior to this session there were two clinics—the medical and

the surgical. Now we have three. The first, twice each week—a general medical clinic; the second, twice each week—devoted to diseases peculiar to women and children; and the third, the remaining two days of the week—the surgical. The first will be conducted by Dr. Da Costa; the second, by Prof. Wallace; and the third, by Profs. Gross and Pancoast. Interesting cases will often present themselves here; and now that the lectures have commenced, I shall endeavor, from time to time, to interest your readers with sketches of some of the most interesting cases.

E. R. HUTCHINS.

Philadelphia, Oct. 13, 1866.

THE eighty-third birthday of Dr. Jeremy Stimson, of Dedham, was appropriately remembered on the 17th of October, by his townsmen and relations, at the residence of his son-in-law, John Gardner, Esq. For fifty-nine years a practitioner in Dedham, and one of the leading consulting physicians of Norfolk County, Dr. Stimson has won the grateful remembrance, affection and respect of a large circle, who gladly embraced the opportunity to honor their revered friend and wish him many happy new years. Evergreen mottoes, autumn bouquets, and an assembled company of old and young, conspired to make the superb October afternoon on which his birthday fell a memorable and happy one for Dr. Stimson, as well as for all those who enjoyed the cordial hospitality with which every one was welcomed to the gathering.

MEDICAL INTELLIGENCE.

M. BROCA, the distinguished anthropologist and pathologist, has been elected into the Académie de Médecine. Among the competitors for the honor were MM. Demarquay, Legouest, Follin and Guérin. Professor Matteucci has also been appointed foreign associate.

Sir Charles Hastings, one of the leading physicians of England, and founder of the British Medical Association, is dead, and Gibert, the well-known dermatologist of San Louis Hospital, Paris, recently died of cholera.

It is proposed to raise a fund in Great Britain for the benefit of Dr. B. W. Richardson, the discoverer of local anæsthesia by ether spray, whose devotion to scientific research has not been advantageous to his own interests.

At the late meeting of the British Medical Association at Chester, the announcement by the President that Lieutenant-Colonel Cox, M.D., of Maryland, was present as the representative of the American Medical Association, was received with much enthusiasm. Dr. Stokes was declared President elect of the next meeting, which is to be held at Dublin. The address in medicine was made by Dr. Bennett; in surgery, by Wm. Bowman, F.R.S.

The *Medical Times and Gazette* reports a case of instantaneous death, at Liverpool, from swallowing carbolic acid. Also a death from the heated fumes of cyanide of potassium.

A fragment of a jaw-bone, probably human, but presenting remarkable pithecoïd characters, has been found in a cavern of the Lesse river, in a perfectly stratified deposit of sandy clay under two layers of stalagmite, at a depth of twelve feet from the surface. With it were

found an unmistakably human ulna, a piece of worked reindeer bone, and remains of the mammoth, wooly rhinoceros and cave hyæna.

A French physician recently became the legatee of the great bulk of a distinguished patient's fortune, but the French tribunal has decided that doctors who shall have attended a person for the illness of which he dies are incapable of receiving any legacy made in their favor during the progress of that malady.

A third case of painless Cæsarean section, successful, under Dr. Richardson's method of local anæsthesia, in London, is announced in the English journals.

The *Lancet* states that Dr. Joly has lately made a report to the Academy of Medicine of Paris, in which he deprecates the increased tendency to the consumption of alcohol by the French nation. A hundred years ago, France only consumed 200,000 hectolitres of alcohol yearly. She now consumes 4,000,000. Dr. Joly declares that an increasing tendency towards mental diseases has been generated by the increasing consumption of spirits, and an official report lately published seems to corroborate his views, the abuse of alcohol accounting for one fifth of the insanity in France.

Late German journals state that the wounds produced by the Prussian needle gun in the Bohemian battles were generally trifling in their nature, but as disabling as those inflicted by weapons of larger calibre. They seemed to occur, to a large extent, in the hands and feet.

The latest number of *L'Union Médicale* announces the death of Ros-tan, on the 4th of the present month, at the age of 76, in Paris.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, OCTOBER 20th, 1866.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	40	38	78
Ave. mortality of corresponding weeks for ten years, 1855-1865	35.4	38.7	74.1
Average corrected to increased population	00	00	81.39
Death of persons above 90	0	0	0

CORRECTION.—In the case reported by Dr. Morland, in our last week's issue, the sphygmographic illustrations were misplaced, that for the *right* radial pulse taking the place of the *left*. The left radial pulse was much the stronger, and the illustration showed it.

BOOKS RECEIVED.—The Science and Practice of Medicine. By William Aitken, M.D. In two Volumes. Vol. I. From the Fourth London Edition. With Additions, by Meredith Clymer, M.D. Philadelphia: Lindsay & Blakiston. 1866.—*Asiatic Cholera. A Treatise on its Origin, Pathology, Treatment and Cure.* By E. Whitney, M.D., and A. B. Whitney, M.D. New York: M. W. Dodd. 1866.

MARRIED.—In this city, 17th inst., Dr. D. M. Goodwin to Miss Hattie T. Cook, both of Montpelier, Vt.—18th inst., Dr. Horace Kimball, of New York, to Miss Antoinette A. Holbrook, of South Braintree.—At Dedham, 17th inst., George Cuvier Harlan, M.D., of Philadelphia, to Miss Mary, daughter of the late Silas Holman, M.D., of Gardiner, Me.—At Framingham, 18th inst., Dr. R. B. Granger, of Boston, to Miss Hester G. Billings, of F.

DEATHS IN BOSTON for the week ending Saturday noon, Oct. 20th, 78. Males, 40—Females, 38. Accident, 1—disease of the bowels, 1—congestion of the brain, 1—disease of the brain, 3—inflammation of the brain, 1—cancer, 1—carbuncle, 1—cholera infantum, 3—cholera morbus, 4—consumption, 11—convulsions, 3—croup, 3—diarrhea, 3—dropsy, 1—dysentery, 4—scarlet fever, 1—typhoid fever, 3—senile gangrene, 1—disease of the heart, 2—hernia, 1—infantile disease, 3—disease of the kidneys, 1—disease of the liver, 2—congestion of the lungs, 2—inflammation of the lungs, 3—marasmus, 2—old age, 3—premature birth, 2—scrofula, 2—smallpox, 4—unknown, 4—whooping cough, 1.

Under 5 years of age, 36—between 5 and 20 years, 5—between 20 and 40 years, 12—between 40 and 60 years, 9—above 60 years, 16. Born in the United States, 55—Ireland, 18—other places, 5.